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ABSTRACT

The Department of Labor, other Federal and state government agencies, and private producers have developed a significant amount of occupational information which can be useful to counselors and others who help students in making the transition from school to work. However, over the years the training of users has not kept pace with the development of materials and methods of dissemination. The purpose of the Occupational Information Dissemination Project was to study the current status of the use of occupational information and to recommend ways of improving training at both the pre-service and in-service levels. Thus users can become better informed about the existence of current and future materials and their importance in helping students make the transition from school to work. The project was divided into three phases: planning, data collection, and analysis of data and preparation of report. Major efforts were made to maximize personal contacts with those knowledgeable in the area of occupational information, to collect data from users in fields concerning their pre-service and in-service training experiences, to review related literature, to draw implications, and to make recommendations for improving training and dissemination of occupational information. (Author)

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FINAL REPORT

January, 1977

OCCUPATIONAL INFORMATION DISSEMINATION PROJECT

Project Director
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to
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TABLE OF CONTENTS

EXECUTIVE SUMMARY i
Introduction, Purpose, and Procedures
Findings
Review of Literature
Project Research Findings
Project Implications
Recommendations
Pre-Service
In-Service
Dissemination
Long Range Needs

SECTION

I. INTRODUCTION AND BACKGROUND 1
Problem and Purpose
Procedures
Report Format

II. REVIEW OF RELATED LITERATURE 4
Pre-Service Training
In-Service Training
Dissemination Methods
Summary

III. REVIEW OF PROJECT RESEARCH FINDINGS 17
Discussion of Respondent's Comments
Consultant's Comments
Pre-Service Training
In-Service Training
Improved Dissemination
Summary

IV. IMPLICATIONS 27
Pre-Service
In-Service
Dissemination

V. RECOMMENDATIONS 31
Pre-Service
In-Service
Dissemination
Long Range Recommendations
General Recommendations
Cost Estimates

REFERENCES 41

APPENDIX 49

EXECUTIVE SUMMARY

INTRODUCTION, PURPOSE, AND PROCEDURES

The Department of Labor, other Federal government agencies, state government agencies, and private producers have developed a significant amount of occupational information which can be useful to counselors and others who help students in making the transition from school to work. However, over the years the training of users has not kept pace with the development of materials and methods of dissemination.

The purpose of the Occupational Information Dissemination Project was to study the current status of the use of occupational information and to recommend ways of improving training at both the pre-service and in-service levels. Thus users can become better informed about the existence of current and future materials and their importance in helping students make the transition from school-to-work.

The project was divided into three phases: 1. Planning (October), 2. Data Collection (November), and 3. Analysis of data and preparation of report (December). Major efforts were made to maximize personal contacts with those knowledgeable in the area of occupational information, to collect data from users in fields concerning their pre-service and in-service training experiences, to review related literature, to draw implications, and to make recommendations for improving training and dissemination of occupational information.

FINDINGS

The findings relative to the problem investigated in this study were generated from a review of literature, a field report from counselors, and input from two independent consultants and others knowledgeable in the area of occupational information. A summary of the findings from these sources follows.

Review of Literature

1. Evidence from the literature review indicates that the research on pre-service and in-service training programs for users of occupational information is lacking. There has been no attempt to seriously address the problem of what both employed and prospective counselors need to know about occupational information and the most effective ways in which they can be trained to gain the necessary competencies to deal with this important aspect of counseling.

2. The dissemination of occupational information has received considerably more attention in the literature than efforts to determine the effectiveness or even the content and extent of pre-service and in-service counselor preparation activities. Mechanized and com-

puterized dissemination methods have emerged along with an apparent increase in the popularity of student-oriented formats such as comic books, newspapers, magazines and cartoons. The research has been fairly extensive as to the effectiveness of various techniques, but more study is needed to keep counselors and other users informed of the effectiveness of new techniques that are developed. While there have been some random evaluation studies, there has been no systematic effort at evaluating dissemination methods.

Project Research Findings

1. The respondents indicated that their pre-service courses were too theoretical. They suggested that more practical knowledge of occupational information materials and delivery systems was needed and that an occupational information practicum be made a part of all counselor education programs.

2. Most respondents indicated that they had little knowledge about computerized and mechanized dissemination systems of occupational information from their pre and in-service training experiences and that they would like to have the opportunity to explore the feasibility of implementing the kinds of systems in their particular locales.

3. Respondents indicated that at present the most effective methods of up-dating occupational information seem to be attending professional conferences, maintaining frequent contacts with employers and workers, and reading periodical lists which they see occasionally. The respondents indicated that they would be interested in learning more about other up-dating techniques that might provide concise and pertinent information.

4. Respondents generally indicated that they preferred visits and media presentations as formats for in-service workshops in time periods of a week or less in length. They also indicated that a variety of groups should be included in these activities such as representatives of government, business and industry, producers of materials, and teachers.

5. Generally speaking, the respondents were not aware of how occupational information programs had improved as a result of their in-service activities. They indicated that there was a need to provide training that would help to integrate the knowledge gained from in-service activities into their on-going occupational information programs, as well as means of evaluating their efforts by, and a systems approach to evaluating the ultimate use and usefulness to students.

6. There was a general consensus that techniques to evaluate occupational information materials have not been adequately addressed in either pre or in-service training experiences. Respondents did not seem to be aware of or make extensive use of the National Vocational Guidance Association's evaluation standards or quarterly reports.

7. Respondents expressed a need for continued demonstrations of much more imaginative production and use of occupational information. A wide variety of approaches should be experimented with and demonstrated to counselors for their use with students and others.

8. The respondents indicated that more occupational information materials and procedures are needed for working with minorities, women, and the handicapped. Many respondents indicated that their occupational information programs had not been dealing with the unique problems of these particular groups.

9. There was concern expressed among those contacted in relation to this project that the emphasis on occupational information centers as separate entities in a school setting needs to be curbed. The respondents felt that emphasis should be in integrating occupational information into the school's total approach to career education. This would mean that occupational information would become an integral part of every school curriculum and that student needs for occupational information would become the focal point for the delivery of such information.

10. In reviewing the occupational information materials that are available to schools, one can only conclude that the complexity of the production and availability of such materials presents a real problem to counselors in deciding what to include in their programs, in determining the quality of the materials available, and in assessing the value of the materials to their clientele.

Project Implications

Based on a consideration of the review of related research, the formal contacts from the field, and other written and informal remarks, the following major implications were drawn:

1. There is a very positive climate in the field for improving the process of dissemination of occupational information at the pre-service and in-service levels, as well as at the implementation stage with students.

2. There is a need for closer cooperation between the Department of Labor and professional associations in the field.

3. There is an obvious lack of research in the area of occupational information, and what has been done fails to provide a focus for future directions.

4. Progress at the local level will not be made without some significant financial and professional support from both the Federal and state levels.

Recommendations

Based on the findings of this project, the following summary of the major recommendations is presented:

Pre-Service

A model occupational information curriculum three year development project should be funded. This project should be carried out by an established university counselor educator who has unquestionable credentials for creativity, active leadership performance, curriculum development, and national recognition for vocational guidance contributions.

In-Service

A systematic plan for counselor in-service training should be created which would provide for a cadre of highly interested and able counselor educators to work with Department of Labor officials in developing a one-week occupational information in-service program. The program would be offered as a summer workshop in each of the fifty states for groups of 50 counselor specialists in occupational information. The purpose of this nation-wide effort would be to provide training to counselors in the latest occupational information dissemination techniques and materials, the most effective ways of employing occupational information to assist their clientele in the transition from school to work, and the most practical methods of evaluating the techniques and materials used.

Dissemination

To promote the dissemination and use of occupational information, the Department of Labor should support the establishment of an occupational information training specialist in each state. This person would be responsible for developing and carrying out a plan for maintaining an up-to-date program including career tapes, television shows, filmstrips, audio cassettes, newsletters, etc. for use by counselors to keep themselves informed about occupational information dissemination techniques and materials and their effectiveness with all clientele, including techniques and materials that are appropriate in helping to erode the stereotyped roles of minorities and women in the occupational world. The occupational specialist would be available as a consultant to deal with special problems in the state, to present in-service training programs to employed counselors, to be a guest lecturer in courses taught for prospective counselors, and to be available to the Department of Labor for individual consulting or as a member of a fifty-person task force comprised of the occupational information training specialists from all fifty states.

Long-Range Needs

The Department of Labor should support the creation over the next decade of a university center for the study of occupational information. The main purpose of this center would be to provide leadership for all aspects of interest in occupational information and to provide training for ten outstanding scholars in the field to pursue research toward the completion of doctoral studies. The center would be charged with investigating occupational information through such topics as dissemination techniques, better means of evaluating occupational information, standards for developing local occupational information, more accurate means of assessing the impact of occupational information, and various systems of classifying and filing occupational information, with a goal of arriving at a common national system which could be utilized at all user levels.

SECTION ONE

INTRODUCTION AND BACKGROUND

Problem and Purpose

The Department of Labor, other Federal government agencies, state government agencies, and private producers have developed a significant amount of occupational information which could be useful to counselors and others who help students in making the transition from school to work. However, over the years the training of users has not kept pace with the development of materials and methods of dissemination.

The Occupational Information Dissemination Project was funded by the Department of Labor for a three-month grant period from October 1 through December 31, 1976. The purpose of the project (see statement of work in Appendix) was to study the current status of the use of occupational information, recommending ways of improving training at both the pre-service and in-service levels so that users could become better informed of the existence of current and future materials and their importance in helping their students make the transition from school-to-work.

Procedures

The project was divided into three phases: 1. Planning (October), 2. Data Collection (November), and 3. Analysis of data and preparation of report (December). Major efforts were made to maximize personal contacts with those knowledgeable in the area of occupational information, to collect data from users in the field concerning their pre-service and in-service training experiences, to review related

literature, to draw implications, and to make recommendations for improving the training of users of occupational information.

Contacts were made over the three-month grant period with numerous officials in the Department of Labor and the U.S. Office of Education, counselor educators, State Department of Education personnel, counselors, and teachers. A major effort was made to have broad contacts with key representatives of the Employment and Training Administration and the Bureau of Labor Statistics, including people in the Employment Service, Occupational Classification Systems, National Occupational Information Service, Office of Technical and Special Services and others. Within the time period available, it was felt a good representation of significant creators, developers, collectors, presenters, and users of occupational information were contacted.

The Project Director also initiated discussions related to the project at various professional meetings, including the Southern Association for Counselor Education and Supervision meeting in Raleigh, North Carolina; the National Vocational Guidance Association Board of Directors meeting; with representatives of the Skyline Career Development Center in Dallas, Texas; the Commissioner's Conference on Career Education in Houston, Texas; the South Carolina State Vocational Guidance Association Fall Conference; and a Regional Conference on Placement in Reston, Virginia. Numerous other contacts were made by correspondence and telephone with State Department of Education officials, counselors, teachers and counselor educators. Two independent consultants were also invited to provide their input for the project.

To assess the impact of pre-service and in-service training experiences on occupational information dissemination, an interview guide was developed. The interview guide was field tested and used to solicit systematic responses from secondary and post-secondary counselors, State Department of Education personnel, and faculty of counselor education departments in several leading universities.

A literature review was conducted to incorporate previous research findings in the areas of pre-service training, in-service training, and dissemination methods with the data collected for this study into a basis for the recommendations emanating from this report.

A complicating, but fortunate, event took place when Public Law 94-482, the Education Amendments of 1976 came into being after the Project was under way. This legislation has many obvious implications for the Project, but was not the focus for the work already started. As a result of this new mandate, more emphasis than ever will center on the proper utilization of occupational information.

Report Format

The organization of the remainder of this report is as follows: Section 2, Review of Related Literature; Section 3; Review of Project Research Findings; Section 4, Implications; Section 5, Recommendations; Section 6, References; and Section 7, Appendix.

SECTION TWO

REVIEW OF RELATED LITERATURE

An extensive literature search was conducted during the first phase of this project. The purpose of the literature review was to identify research that has been done on programs used to prepare and keep counselors and others updated on the availability and most effective use of occupational information.

ERIC documents and a Dissertation Abstracts search were conducted by the staff of the Virginia Tech library. Unpublished studies pertinent to the Project were also acquired, but it was obvious there were many unpublished reports which simply were unavailable. The following three specific areas were investigated: pre-service training, in-service training, and dissemination methods.

Pre-Service Training

The need for prospective counselors to develop competency in the area of occupational information has been widely accepted over the years. Over eleven years ago Hoyt (1965)* proposed that as a part of the total development of a prospective counselor, there was a need to have competence in collecting, organizing, and disseminating occupational information. He elaborated by saying that a prospective counselor should be aware of the commonly available sources of occupational information and should be able to evaluate occupational information in terms of its appropriateness for a given population; to discuss the advantages and disadvantages of various filing systems; to communicate

*All references cited are at the end of the report in a special reference section.

occupational information to groups as well as individuals; and to locate and display occupational information so that it will receive maximum use.

Strowig and Perrone (1965) indicated that the most current and critical issues facing counseling and guidance in the mid-1960's were: (1) Should there be more emphasis on vocational development or vocational information in training and upgrading counselors? (2) Should emphasis be given to classroom teaching or a practicum in preparing counselors to use occupational information? (3) How can the readiness of students to make the transition from school to work be determined? and (4) Is it more important to emphasize meeting manpower needs or to concentrate on the student's vocational self-actualization in vocational guidance and counseling? These questions still seem to be unanswered in the literature more than a decade later.

If these two reports accurately reflect the needs for the training of prospective counselors and the real concerns of the vocational guidance and counseling field eleven years ago, then the research done for this Project appears to show that the field has not attempted to seriously address the problem of what counselors need to know about occupational information and the most effective ways in which they can be trained to gain the necessary competencies to deal with this important aspect of counseling. The problems still exist and the few studies reviewed indicate that little has been done to remedy the situation. It was not surprising that the same problems of determining acceptable levels of competency in the area of occupational information by prospective counselors and distinguishing the most im-

portant aspects of occupational information to emphasize in counselor education programs are still frustrating the efforts to adequately prepare counselors for the field. The passage by the Association for Counselor Education and Supervision (1976) of the "Position Paper, Counselor Preparation for Career Development/Career Education," was clearly the most positive action in this regard that has occurred in recent years.

In-Service Training

Because there seemed to be some confusion as to what and how prospective counselors should be taught about occupational information in counselor education programs, in-service training takes on considerable importance. Ashley (1976) has stated that in-service training for practicing school counselors was important because topics relative to improving vocational guidance services need constant updating. However, research to determine the most effective in-service training approaches with which to up-date and up-grade counselors and other users of occupational information was scarce.

The most impressive study reviewed was a research effort by Ashley (1976) designed to develop, implement, and evaluate counselor activities to better meet the vocational development and career-planning needs of secondary school youth in Kentucky. Emphasis in this project was to up-grade and retrain counselors and assist them with planning, implementing, and evaluating improved vocational guidance activities. The up-grading and re-training of counselors was done in the framework of an integrated and systematic approach to vocational guidance. Results of this study indicated that an integrated guidance

approach in which students were provided a variety of exploration activities related to measured occupational interests, attitudes, and aptitudes was highly beneficial to the student's career development.

Neher (1971) investigated the use of occupational information materials by secondary teachers in Indiana. He found that more than half of respondents to his study felt that occupational information should have been incorporated into the curriculum but that it was rarely done. This study indicated that teachers rarely mentioned occupational clusters or the effects of technological changes on occupational trends; they rarely discussed local employment opportunities, wages, and other requirements related to employment; and they rarely used occupational information materials such as employment reports and audio-visual presentations of occupational information. The study recommended that curriculum revisions be made that would incorporate occupational information into the learning processes of students and that occupational information workshops be provided for faculty as a part of their regular in-service activities. Roberts (1968) also pointed up the problem that few classroom teachers have been trained through their teacher-training programs in the tools and techniques of using occupational information, and he suggested that improving the ability of teachers to use occupational information should be a priority. Clearly some of this may have changed with the advent of career education programs in public schools.

Clapsaddle (1973) studied the effects of career education in-service training on sixth-grade teachers. The implications of the study were that (1) in-service sessions should be made as informal as possible to allow teachers to review and acquire materials available

for distribution and to share materials with other teachers, and (2) special attention should be given to allow teachers to develop their own curriculum materials. The author felt that teacher-developed materials have an advantage over commercially-produced materials in that teachers tend to use, with pride, materials they have personally developed; teacher-prepared materials are generally designed specifically for the local population and in some instances, for individual students; teacher-prepared materials aid the process of lesson preparation because teachers know the specific instructional procedures, objectives, and resources; and implementation of concepts, skills, and materials gained from in-service training can be simultaneous with the in-service preparations.

It was also evident from the literature that most professional organizations have been doing little to promote information related to careers in their field. The health careers field has been more active than others, but the efforts have not been that uniform. The United Hospital Fund of New York conducted a Guidance Counselor Institute for Health Careers in 1966. The purpose of the Institute was to provide better information on health career opportunities to counselors. It was concluded from the study that occupational information should be provided to counselors in a variety of ways. Other state and local health careers groups continue to do the same kind of information dissemination work.

It was also clear that relatively little time and attention have been spent on evaluation of occupational information in-service programs. It appeared that little use has been made of the extensive work of the National Vocational Guidance Association's Career Information

Review Services. Some of this may be altered with the establishment of a basis for Career Information specialists as currently proposed by an Ad Hoc Committee of the National Vocational Guidance Association (1976).

Dissemination Methods

The dissemination of occupational information has received considerably more attention in the literature than efforts to determine the effectiveness or even the content and extent of pre-service and in-service counselor preparation activities. There has been an emergence of mechanized and computerized dissemination methods along with an apparent increase in the last 5-10 years in the popularity of student-oriented formats such as comic books, newspapers, magazines and cartoons. The research has been fairly extensive as to the effectiveness of various techniques, but more study is needed to keep counselors and other users informed of the effectiveness of new techniques that are developed. There certainly has been no systematic effort at evaluating dissemination methods.

The capability of specific methods and procedures of disseminating occupational information to promote career behaviors has been investigated in several studies. A variety of populations have been employed, including minority groups.

Elliston (1975) investigated the effects of three methods of presenting occupational information on the vocational maturity of black college students. The following three dissemination techniques were employed: career logs, simulation games, and written occupational briefs. The results of this study indicated that all three dissemination approaches were useful in promoting vocational maturity.

Students who were subjected to the dissemination techniques attained higher vocational maturity scores in the areas of [illegible] selection, (2) planning, and (3) problem solving.

A group of inner-city male high school students was studied by Payton (1971) to determine the nature of occupational information available and to investigate the methods by which the materials were presented. He found that, in general, the materials available were adequate, but that traditional methods of dissemination were not contributing to the students' awareness of the world of work and the ability of the students to make career decisions. Recommendations were that an occupational information program be developed to provide career guidance to students before they entered high school; that career planning become a part of each student's total school program; that an occupational information center be established and promoted in each school; and that the entire school curriculum be developed around career education.

Yungman (1969) investigated the relative efficiency of pictorial-auditory, auditory, and written modes of occupational information dissemination in working with minority group youth. The findings of this study suggested that the pictorial-auditory mode stands out as a promising technique of occupational information dissemination with this particular group.

Two studies were reviewed that supported the contention that career exploration behaviors can be taught. Bartsch (1969) tried to determine whether the teaching of occupational information skills was more effective in improving a student's knowledge of the world of work than simply increasing the availability of occupational information.

The study concluded that students who were exposed to small group sessions using role-playing and simulations were able to gather significantly more accurate and comprehensive occupational information than students who did not participate in the sessions. Aiken (1973) found that career-information seeking behaviors can be effectively taught to college students in group reinforcement counseling sessions and recommended that further research be done to determine whether this method is applicable in other educational settings.

Studies by Jeppesen (1971), Laramore (1971), and Zikmund (1971) reported on the effectiveness of slide presentations of occupational information. Jeppesen indicated that the use of slide presentations was significant in helping elementary children gain more information about occupations. Laramore found that slide-tape presentations along with guest speakers were superior to written occupational briefs in stimulating career information-seeking behavior of junior high school students. Zikmund discovered that occupational information provided solely by slide-tape presentations was as effective as the occupational phase of a group guidance program using a wide variety of audio-visual presentations, class discussion, and a required paper on a selected career.

Petersen (1971) compared the relative effectiveness of two approaches used to disseminate occupational information to ninth grade students. The two methods investigated were video cassette and audio cassette presentations. Results of this study indicated that either video or audio presentations could be used without a detrimental effect upon student's acquisition of occupational information, video cassette presentations resulted in more occupational preference changes, and

audio cassettes were a relatively inexpensive but effective means of disseminating as compared to video cassettes.

Perrone (1968) and Hannan (1975) found that counselors place primary emphasis on well-known sources of occupational information such as the Occupational Outlook Handbook and the Dictionary of Occupational Titles and leave localized information un-developed or unused. Hannan stated that counselors tend to favor more personal approaches to disseminating occupational information such as individual and group counseling, while students tend to favor more impersonal approaches such as media and field trips. It was also reported by Hannan that counselors tend to underestimate their importance as disseminators of occupational information for those students who plan to enter the world of work upon graduation from high school. In an informal tabulation compiled by Dudley (1976) at the Indiana Career Resource Center it was clear that users in the state requested sound film/strips and motion picture films far beyond any other resource available. Twice as many requests were received for the sound film/strips than any other resource, thus establishing the fact that a quick and easy resource was the most attractive to a state-wide user group.

The mechanized system, Vital Information for Education and Work (VIEW), has been the subject of several studies, with quite favorable results. The VIEW system has expanded from its beginnings in San Diego, California, operating in over 35 states in 1976 with an informal organization of major users. Smith (1968) attempted to measure the acquisition of occupational information by high school sophomores after exposure to the VIEW system, which presents occupa-

tional information on microform aperture cards. He found that this system was both efficient and effective in helping students to acquire useful knowledge about the world of work. Gerstein (1969) also used a group of secondary students and discovered that students perceive occupational information presented by the VIEW system to be more helpful, understandable, interesting, complete, and up-to-date than occupational information they had previously received. It was also found that students using VIEW acquired more knowledge about careers than students using more traditional occupational information sources supplemented by a class in career planning. Gerstein's work in California suggests that using the VIEW system in conjunction with counselor-taught unit in career planning seems to be an optimal way of disseminating occupational information to students.

English (1974) studied a group of secondary students in Hartford, Connecticut, to determine whether innovative approaches to the presentation of occupational information had greater impact on the vocational maturity of students than the more traditional counselor-centered approaches. He employed the VIEW system as well as the Guidance Information System (GIS), a computerized guidance system containing an occupations file marketed by the Time Share Corporation. Vocational maturity was measured using Super's Career Development Inventory. The results of this study showed that exposure to both techniques (VIEW and GIS) lead to significantly increased vocational maturity scores. Ashley (1976) concluded that the VIEW program was an excellent method of stimulating students to explore occupations. He suggested, however, that interest in using the VIEW system for exploration purposes seems to decrease at the upper grade levels in high

school.

The emergence of the computer as a method of disseminating occupational information has become more evident during the past few years. The Department of Labor has funded the development of a computerized National Occupational Information Systems (NOIS) in eight states. According to Stern (1974), the Department of Labor assessed several experimental computerized guidance programs and found that the complexity of approaches and contradictory results necessitated a more systematic development of computerized dissemination techniques. The central component of the funded programs was the development of a local and state information base which could be worthy of the sophistication available in the computer hardware. While the pioneering Oregon approach as reported by McKinlay (1974) has seemingly established itself as a self-supporting system, the Department of Labor experimentation is still in a formative stage of development. There were other states such as Iowa which were proceeding with their own computerized occupational information system. Clearly the total approach of computer information systems has great possibilities which need to be explored to their fullest potential.

With career guidance and accountability as priorities of the guidance profession in the seventies, Harris (1974) explained that the availability of computerized guidance systems could provide updated and instantly retrievable occupational information which may prove to be of great benefit to the counselor. Most agree, however, that the computer should be used only to relieve counselors of certain clerical duties and allow them more time for the human sensitivity and interaction demanded of the counselor. The literature has reported that students

generally indicate a highly enthusiastic acceptance of computer-based guidance programs (Impelleteri, 1968; Harris, 1972; and Myers et al, 1971), but other studies have shown that individual counseling was also very important. Price (1971) found that students who explored and selected courses with help by the counselor performed as well as students who used the computer for exploration and course selection on the following measures: students' understanding of information relevant to course selection, students' self-reported reactions to experiences with the computer and the counselor, an evaluation of the suitability of courses selected by counselors who were not aware of the method used to select courses, and sum of weighted course changes during a two-month period following the initial course selections. Melhus (1971) suggested that personal counseling and computer-assisted counseling were equally effective as methods of facilitating vocational choices for students classified as having a high readiness for counseling. For students with a low readiness for counseling, personal counseling was more effective. The implications were that counselors should evaluate the readiness of students for counseling experiences and better allot their time to those students who had greater need for personal attention.

A promising continuing education development was the advent of Regional Training Centers (RTC's) located in the regional offices of the Employment and Training Administration of the Department of Labor. Even though these centers have been in operation a relatively short time, they show great potential for filling a gap in the in-service needs of counselors. A wide variety of offerings such as Introduction to the Dictionary of Occupational Titles, Job Search Techniques, and

Labor Market projections for 1985 and beyond have been developed. Currently, these offering are available primarily to Department of Labor field staff, CETA prime sponsors and those closely related to these programs. An expansion to include counselors and teachers from schools and higher education institutions appears to be a strong possibility.

Summary

1. Very little research has been conducted in the area of pre-service and in-service training for users of occupational information. Considerably more study has been done in the area of dissemination, but additional research was needed in this area as well.

2. Exposure to occupational information was helpful in developing interests and formulating opinions about vocations.

3. Providing a variety of career planning experiences seemed to be a beneficial strategy in raising the vocational maturity of individuals, particularly those from low socio-economic backgrounds.

4. The use of media to disseminate occupational information seemed to be an effective method at most age levels.

5. The VIEW system was given strong support as being an effective mode of disseminating occupational information.

6. Computer-based occupational information systems have obvious potential, but more research is needed on evaluating all innovative approaches to presenting occupational information.

7. The Regional Training Centers of the Employment and Training Administration show great promise for an expanded and cooperative training effort with public school personnel.

SECTION THREE

REVIEW OF PROJECT RESEARCH FINDING

Background data for this project was obtained through contacts with users of occupational information in the field, counselor educators, State Department of Education personnel, and independent consultants. There was a sampling of opinion from key leaders in the field as well as counselors both in training and on the job. There were several hundred professionals from over twenty states involved through direct communication on the project. An interview guide was developed during the planning phase of the project to obtain data regarding both the pre-service and in-service training experiences of users of occupational information and the means of improving dissemination of occupational information. Visits with community college and secondary school personnel also provided information on innovative local programs, including career centers and a school district computerized occupational information dissemination program operation. Counselor educators and State Department of Education personnel responded through correspondence and personal interviews relative to the project objectives and in informal discussions with the Project Director. Two nationally recognized consultants were invited to Virginia Tech to provide their views on the project as well as assisting in assimilating the ideas obtained through the many contacts made.

Discussion of Respondent's Comments

It became evident from the contacts made during this project that the problem of informing and preparing users of occupational information regarding the existence and importance of occupational in-

formation materials and dissemination techniques was a real one. While providing students with adequate occupational information to be used in their career decision-making process was a noble idea, trying to meet the unique demands of these students presented users of occupational information with enormous difficulties. Sifting through the myriad of materials and techniques available was an overwhelming problem in itself, but to pick, choose and evaluate materials for a particular group based on developmental needs was even more difficult.

A general theme from responses to the project from counselor educators as well as State Department of Education personnel was that using occupational information was much more than simply providing materials; rather it was a part of a life-long process of personal data collection and that many occupational information programs are designed for static-information-giving only without regard for the dynamic developmental needs of the clientele. It was suggested that counselor educators, State Departments of Education and producers of occupational information materials be made more aware of the need to inform those in the field of the dynamic process of personal acquisition of occupational information and to provide pre and in-service programs, along with materials and dissemination techniques that meet the developmental needs of students for occupational information.

There was concern expressed by those contacted in relation to the project that occupational information programs should not be developed as separate entities in a school setting. It was proposed by Tom Jacobson in Grossmont School District in San Diego, California and others that the emphasis should be toward integrating occupational information into all curricula as well as relating it to other guidance

activities such as assessment, counseling, placement and follow-up. This would mean that occupational information would become an integral part of every school curricula and that student developmental needs for occupational information would become the focal point for the delivery of such information at all grade levels.

Another point which was consistently made by counselors was concern for the lack of effectiveness of pre and in-service counselor education programs on producing real improvement on occupational information activities. The respondents generally agreed that training programs were not providing sufficient help in integrating acquisition procedures, disseminating techniques and evaluation methods into occupational information programs. It was suggested by Jacobson that training programs be designed that would allow counselors to develop their own materials and propose specific procedures for implementation. In this way, they could produce materials that were geared to their particular clientele, whether it be elementary, high school, community college, university, or adult levels. Along this same line it was suggested that in-service programs assist counselors to develop implementation materials utilizing a variety of media. Wherever successful programs were visited or discussed during the project, there were two goals clearly emphazied: (1) Integration of occupational information into a school-wide base and (2) Implementation of ideas for counselors as a major part of pre and in-service activities.

Still another suggestion encouraged the development of a network of counselors especially interested in occupational information. These individuals could be both professionals and paraprofessionals in each state who might provide a liasion between users and developers of

occupational information materials. This kind of system could enhance the organization and dissemination of the materials currently available as well as planning for future developments.

Respondents in the field expressed great interest in collective systems of information such as Vital Information for Education and Work (VIEW) and computerized systems like National Occupational Information System (NOIS). Those who were using the various systems or a combination of systems were especially enthusiastic. There was strong sentiment expressed, however, that these approaches were not a panacea. There were problems expressed relative to access to terminals, as well as up-to-dateness of the material and difficulties in maintaining user interest. From many sides came concern about sustaining the costs involved with computer systems. An interest in an early comprehensive evaluation of all mechanized approaches also was reflected.

A major point was stressed by several key people in the field including Kenneth Hoyt, Director of the Office of Career Education about the necessity of balancing educational and occupational aspects of whatever information was made available to users. Rather than having separate information or even separate centers, there was a strong appeal to consolidate both sources and content into what may be referred to as occupational/educational information or by the more comprehensive term career information. Either way there was evident sentiment to create as much of a merger as possible for the sake of the user.

Consultant's Comments

Two nationally recognized leaders in career development and occupational information were invited to consult on the project (Robert Hoppock, Professor Emeritus, New York University and David Winefordner,

Director, Career Decision Making Project, Appalachia Educational Laboratory, Charleston, West Virginia). Their input relative to the project was excellent. They supplied valuable insights concerning current trends and possible future developments. Sessions with each of the consultants were oriented to specific questions. A list of questions was developed based on the reactions and responses from the interview schedules, correspondence received, and informal contacts made at professional meetings, as well as from key points taken from the review of literature. In most cases the consultants reinforced the comments of those in the field, just as many of the ideas brought up by the consultants had been endorsed enthusiastically by those in the field. The questions were generally directed toward pre and in-service training for the users of occupational information. A summary of the comments from the consultants follows.

Pre-Service Training

1. Part of every counselor education program should be an occupational information practicum. Prospective counselors should have practical experience in providing programs to students and parents as well as teachers and in showing that good occupational information is an indispensable element in a school curriculum, vital to career decision-making.

2. Certification of counselors should be changed, requiring greater competency in occupational information. It is time to further implement the development of competency-based counselor education programs which focus on career development.

3. Counselor education programs need to be integrated with teacher education programs if the career education concept including occupa-

tional information is to realize its potential in school curricula. Teachers and counselors must learn how they can help each other in providing career learning experiences for students.

In-Service Training

1. All approaches to in-service training must reflect more of a common denominator. This means that more leadership on developing systematic approaches to train users of occupational information must come from those who collect and create the occupational information materials in the first place at the national, regional and state level. Counselors at the local level are best at implementation, not development. The counselor needs to be proficient at assisting students to know how to use occupational information materials in making career decisions.

2. There needs to be a major long-term commitment to a consistent and well-planned in-service occupational information program for counselors. This should be carried out on a time schedule throughout the year, every year. A variety of methods should be attempted and evaluated to determine which is most effective. Possible leadership could come from university counselor education faculty, the State Department of Education, State Employment Commissions, and Regional Training Centers in the Employment and Training Administration of the Department of Labor.

3. One means of creating a rapid impact on the in-service needs of counselors would be for the Department of Labor to engage 15-20 of the best qualified career-oriented counselor education institutions and have their leading faculty conduct one-week workshops in 3-4 nearby states. Representatives of these 15-20 institutions should be brought to Washington for a comprehensive briefing and planning session with the

Department of Labor and other Federal agencies to assure quality and continuity of content.

Improved Dissemination

1. New and improved means of getting materials to counselors and from them to teachers, parents and students are badly needed. One means of doing this might be to provide the Occupational Outlook Quarterly at very low or no cost to each secondary school and community college for a trial period. Inside there could be news items of timely interest which could be duplicated easily and routed to faculty or made available to students. An "Occupational Notes" or news-in-brief could be made available in a Western Union "Mailgram" format to attract attention. Similar efforts might be made on a regular basis for inclusion as feature or filler material in both professional and popular publications.

2. A varied approach to media must be employed. Print media alone is not sufficient. Much wider use of public and commercial televisions must be planned for. Films and video types should be made available at low cost on a general basis as well as slides (with scripts), film strips, and cassettes, as well as new and brighter print materials. Local, regional and state "Career Hot (phone) Lines" should continue to be explored and evaluated.

3. An integrated approach to utilizing occupational information in the schools is badly needed. Rather than seeing such use as a separate function, this means more blending of occupational information into other curriculum materials, i.e. books, study materials and the like. In addition all aspects of a career guidance program should use and complement the involvement of occupational information in assessment, counseling, placement and follow-up.

Summary

1. Generally speaking, the respondents indicated that their pre-service courses were too theoretical. Respondents indicated that more practical knowledge of occupational information materials and delivery systems was needed, and they suggested that an occupational information practicum be made a part of all counselor education programs.

2. Respondents indicated that at present the most effective methods of up-dating occupational information seem to be attending professional conferences, maintaining frequent contacts with employers and workers, and reading periodical lists which they see occasionally. The respondents indicated that they would be interested in learning more about other up-dating techniques that might provide concise and pertinent information.

3. Respondents generally indicated that they prefer visits and media presentations as formats for in-service workshops in periods of time of a week or less. It also was indicated that a variety of groups should be included in these activities including representatives from government, business, and industry, producers of materials and dissemination hardware, and teachers.

4. Generally speaking, the respondents were not aware of how occupational information programs had improved as a result of their in-service activities. They indicated that there is a need to provide training that would help to integrate the knowledge gained from in-service activities into their on-going occupational information programs as well as means to evaluate their efforts, including some systems approach to evaluating the ultimate use and usefulness to students.

5. There was a general consensus that techniques to evaluate occupa-

tional information materials have not been adequately addressed in either pre or in-service training experiences. Respondents did not seem to be aware of or make extensive use of the National Vocational Guidance Association's evaluation standards or quarterly reports.

6. There was a need to continue to demonstrate much more imagination in production and use of occupational information. A wide variety of approaches should be experimented with and demonstrated to counselors for their use with students and others.

7. Most respondents indicated that they had little knowledge about computerized and mechanized dissemination systems of occupational information from their pre and in-service training experiences and that they would like to have the opportunity to explore the feasibility of implementing the systems in their particular localities.

8. The respondents indicated that they need more occupational information materials and procedures to work with minorities, women, and the handicapped. Many respondents indicated that their occupational information programs had not been dealing with the unique problems of these particular groups.

9. There was concern expressed from those contacted in relation to this project that the emphasis on occupational information or career centers as separate entities in a school setting needs to be curbed. The emphasis should be in integrating occupational information into the school's total approach to career education. This would mean that occupational information would become an integral part of every school curriculum and that student needs for occupational information would become the focal point for the delivery of such information. Career centers should fit into this approach rather than the reverse.

10. In reviewing the occupational information materials that were available to schools one can only conclude that the complexity of the production and availability of such materials presented a real problem to counselors in deciding what to include in their programs, in determining the quality of the materials available, and in assessing the value of the materials to their clientele.

SECTION FOUR

IMPLICATIONS

This is an informal section of the report which contains the clinical impressions of the Project Director built up over three-months of intensive investigation of the issues involved with the dissemination of occupational information buttressed by twenty-five years experience in the field. These implications grew out of the obvious kinds of points which were evident in the review of related research as well as the formal comments which came in from the field via the interviews made from the schedule guide. In addition, there were obvious impressions which came from long discussions with dozens of leading professional people in the field. This was especially true relative to the extensive conversation with the two consultants on the project who came into Blacksburg for a lengthy review of the subject.

One of the main implications which stands out was the obvious interest on the part of counselors in the field in getting and using more occupational information. There was great interest at every level in improving the status quo. There was a strong interest expressed in moving rapidly on improvements at all levels. There was a desire for change. In short, there was a very positive climate for improving the process of dissemination of occupational information at the pre-service, in-service and implementation level with students.

There was another obvious implication which indicated that not much progress was going to be made without some significant financial and professional support from the Federal/state level. Certainly, there were strong programs or projects here and there, but broad mean-

ingful improvement must be launched from a wider base than pilot efforts. To stimulate far reaching changes though in current practice, new initiatives are going to have to be backed by substantial Federal and state funding.

A third general implication was that there was an obvious lack of research in the area of occupational information. There have been some studies conducted over the last quarter century but few can be truly called significant. Most of all there was a clear lack of systematic research in the field. What has been done fails to provide a focus for the field. A centrally directed responsible effort was needed badly to correct this problem.

Some implications which relate to the three major divisions of the project follow.

Pre-Service

At this level the most obvious implication was a need for some standardization of what goes into the counselor preparation program regarding all phases of occupational information. The lack of availability of a common core of acceptable content was evident. Some type of a nationally developed course with flexible modules needs to be produced, field tested and evaluated.

Another implication which stands out was the need to strengthen the certification requirement with respect to counselor competencies in the area of occupational information. This should go beyond traditional courses to get at the important competency issues. The same holds true, of course, for the re-certification in which an up-dated competency in occupational information should be specified as well.

In-Service

There were some random efforts which were going on in in-service training which were commendable, but across the country, there was no pattern of general improvement. The implication was clear: there needs to be a systematic in-service program to up-grade counselor competency in relation to occupational information. This needs to be planned and carried out over a long-range period (4-8 years) and must be a consistent and high quality effort.

A cadre of highly competent leaders in the area of in-service education relative to occupational information needs to be organized. This leadership has not developed on a voluntary basis so it seems the Federal/state government must support at least one university or agency in each state to make sure this is carried out. Surely a counselor education program in every state could organize such a service if properly directed and financed to do so.

Dissemination

A main implication here was for a better effort to integrate the dissemination effort at all institutional levels. This does not refer as much to separate activity regarding occupational information but refers more to integration with counseling, assessment, group guidance, placement and follow-up. How to do this was less clear than the need to accomplish it; however, major new initiatives need to be undertaken.

Another implication regarding dissemination of occupational information was the need to use multiple approaches and methods. No single approach showed signs of superiority. A multi-media effort must be launched and sternly evaluated to draw out indications of most effectiveness, or multi-effectiveness.

Another implication was the continued need to search for a proper theoretical base for the dissemination of occupational information. There was all too much dispensing of information without regard for readiness, age or grade level or the developmental characteristics of the individual. A firmer rationale needs to be established through research to provide this foundation.

There was a clear base of support for greatly expanded mechanical means of disseminating occupational information via computers or VIEW system combinations or other means. The additional implication which keeps coming through on this point is a need for comprehensive evaluation of any and all such systems. It was clear that certain things can be accomplished by utilizing these systems. The question uppermost was the ultimate value to the user and the justification of the expense involved.

There was one final point which needs to be added even though it is mainly subjective: the clear sense of receptivity from school people toward vocational guidance assistance from the Department of Labor and its various component units. There is a kind of anxious waiting every two years for the new Occupational Outlook Handbook and the related supportive documents. There is the same feeling abroad now in anticipation of the fourth edition of the Dictionary of Occupational Titles. There is a great interest in new charts, occupational briefs, forecasts and projections by BLS, ETA, the Women's Bureau, and others. Department of Labor materials are respected and well used. This high degree of confidence in DOL is part of the reason for the positive climate in the schools today toward occupational information. There is every reason to believe that an expanded program of assistance from DOL to the schools would be very well received.

SECTION FIVE

RECOMMENDATIONS

Based on the findings of this study, it easily could be concluded that any recommendations made are urgent and need immediate implementation. Realistically, though, all recommendations are not likely to be perceived by every reader as having equal importance. Some broad targets are suggested for immediate implementation. Others are suggested for careful consideration. If current funds are available to support all recommendations, then certainly all should be implemented. Certainly over a two-to-four-year period all recommendations should be thoroughly discussed and acted upon if at all possible.

A recommendation has been made under each of the pre-service, in-service, and dissemination categories. Also included are long-range and general recommendations which did not necessarily lie in one of the categories but were, nevertheless, considered important enough for furthur consideration.

Pre-Service

It is a recommendation of this report that the Department of Labor fund a three-year project to develop, field test, and evaluate a model occupational information curriculum. The purpose of this effort would be to make available to all counselor education institutions curriculum materials that would be easily integrated into a counselor education program and would provide instruction in the fundamental aspects of collecting, organizing, disseminating, and evaluating occupational information. This project should be carried out by an established university counselor educator who has unquestionable cre-

dentials for creative thinking, active leadership performance, curriculum development, and national recognition for vocational guidance contributions. The curriculum would be written in modular form with modules developed for each of the following topics: the role of work in America; theories of career development; classification systems of occupational information; Federal, state, and local sources of occupational information; methods of disseminating occupational information; evaluation of occupational information; occupational information for groups with special needs; uses of occupational information in counseling assessment, group guidance, placement and follow-up; uses of occupational information in a school curriculum; and the availability and use of occupational information with minorities and women. A staff would consist of a project director, secretary, and two graduate research assistants. There also would be a five-person advisory board made up of a leading counselor educator, counselor, state supervisor of guidance, local supervisor of guidance, and a curriculum specialist. Representatives of the Department of Labor and the U.S. Office of Education would serve as Ex Officio members. Estimated cost of this project would be $200,000* for the proposed three year grant period.

In-Service

It is recommended that the Department of Labor support the creation of a systematic plan for counselor in-service training which would provide for a cadre of highly interested and able counselor educators to work with Department of Labor officials in developing a one-week occupational information in-service program. The purpose of this effort would be to provide training for counselors in the latest occupational information materials and dissemination techniques, the

*See page 40 for a detailed description of cost estimates.

most effective ways of employing occupational information to assist their clientele in the transition from school to work, and the most practical methods of evaluating the materials and techniques used. After development, field testing for two years, and evaluation, the program would be available as a summer workshop each year in the fifty states for groups of fifty counselor specialists in occupational information. Content for the workshops would center around the following topics: Day 1 - clientele and their career development needs for occupational information; Day 2 - availability and practicality of various sources of occupational information materials and dissemination techniques; Day 3 - making the most effective use of available occupational information materials and methods of dissemination; Day 4 - working with faculty and staff to integrate occupational information into the total educational effort of an institution; and Day 5 - maintaining and evaluating an effective occupational information program. The workshops would be designed so that either college credit or certification renewal credit could be granted to those who participate. At least ten to fifteen counselor educators with a commitment to occupational information should be recruited to help in the planning and development of the in-service program. This leadership group, also, would be assigned the responsibility of field testing the in-service program in selected states. There would be fifty counselors from each state in forty-five separate workshops in each of the two summers of field testing. There would be a project staff which would coordinate the planning and development phase (1 year), the field testing phase (2 years), and the evaluation which would be concurrent with the third year. This evaluation would be conducted by the Project Director in cooperation with

the Department of Labor. Funding for this recommendation would be $1,250,000 for the proposed three-year period.

Dissemination

To promote the greater dissemination and use of occupational information, it is recommended that the Department of Labor support the creation of an occupational information training specialist (OITS) in each state. The purpose of this project would be to provide an individual who would be responsible for facilitating the development and maintenance of up-to-date occupational information programs in all educational institutions throughout a particular state. The occupational information training specialist would be available as a consultant to present in-service training programs on a regular basis for employed counselors, as a guest lecturer in courses taught for prospective counselors, and to the Department of Labor for individual consulting, or as a member of a fifty-person task force comprised of the occupational information specialists from all the states. The occupational information training specialist should be able to work with the counseling staff as well as the faculty of an institution to solve problems dealing with occupational information that are unique to the particular setting, to provide a current source of information on materials and dissemination techniques appropriate for a given clientele, and to advise counselors and faculty on the most effective use of the materials and dissemination methods available to an institution.

Each occupational information training specialist should be a faculty member retained by the Department of Labor on a yearly basis at a state university. Initial funding for this program should be to support a one-year planning and development phase followed by a second

phase consisting of a ten-state pilot study to run for a two-year period in which case the OITS and staff would be retained at $50,000 per year. A university-based project staff would be responsible for the planning, development, field testing and evaluation over the grant period. Estimated three-year cost for this recommendation would be $1,150,000.

Long Range Recommendations

1. It is recommended that the Department of Labor support the establishment over the next decade of a university center for the study of occupational information with an initial funding period of four years. The purpose of this center would be to provide leadership for all aspects of occupational information. The center would also provide graduate education over a two-year period for ten outstanding national scholars to pursue research in the field toward the completion of their doctoral studies.

With all the resources available to it, the center would be charged to investigate areas such as the following as well as others pertinent to the field: study occupational information dissemination techniques, as well as develop new methods; create better means of evaluating occupational information; design standards for developing local occupational information; devise more accurate means of assessing the impact of occupational information; study the various systems of classifying and filing occupational information with a goal of arriving at a common national system for all user levels; seek ways to integrate occupational information into the total training of prospective counselors; prepare materials which emphasize the developmental aspects of occupational information and delivery modes which could be useful at

the different stages of career development; develop and test materials and techniques that could be effective in breaking down stereotyped roles of minorities and women in the occupational world; and provide supportive research on how occupational information could be used by those workers who face the possibility of retraining for a new job or up-grading skills for a current position. Funding for the university center for the study of occupational information would be $150,000 per year for a total of $600,000 for four years.

2. It is a recommendation of this report that the Department of Labor continue its support of a program to develop various approaches to the dissemination of occupational information. The computerized approach to educational-occupational information dissemination probably will not be available to all who might profit from it, and it is most likely that everyone will not be willing to take advantage of its availability. The more traditional procedures for collecting, organizing, disseminating, and evaluating educational-occupational information must be studied further to (1) determine effectiveness as compared with the computerized and other mechanized approaches and (2) investigate ways in which using traditional dissemination methods can be made more interesting to student users. Therefore, the recommendation is made that the Department of Labor fund in ten states a model educational-occupational information resource center. A university-based project staff would be responsible for the planning and development of the ten-state wide centers and the selection of the locations for the two year field test, as well as the evaluation. The ten-state centers would all operate within overall guidelines and budgets for the period. Cost of

the project would be $1,150,000 for a three-year period.

General Recommendations

1. It is recommended that every effort should be made to bring the Department of Labor and its various units closer together with the major professional associations in the vocational guidance field - the American Personnel and Guidance Association and all of its divisional groups, especially the National Vocational Guidance Association, American School Counselor Association, and Association for Counselor Education and Supervision. These groups need to be better represented in DOL advisory activities in order to open up better channels of communication concerning common problems. Association representatives could provide feedback on various DOL projects and activities, as well as make suggestions for future policy and program directions. Advisory committees could be established or expanded in areas such as

- Development of Dictionary of Occupational Titles
- Development of Occupational Outlook Handbook
- National Occupational Information System
- Education and Work Project
- Women's Bureau
- Apprenticeship Programs

The active professional members of these associations can provide needed consultation and advice to further solidify the growing cooperation between DOL and the field.

2. It is recommended that an expanded effort be made to provide additional occupational materials which can stimulate interest in non-traditional careers for women and minorities, as well as non-stereotyped materials for all people. Progress along these lines has been quite remarkable in a few highly visible areas, but in the

broad sweep of occupations, change appears to be slow in coming. Therefore, new and innovative approaches need to be advanced. These should take on the look of posters, charts, colorful brochures, booklets, television shows, films, film/strips, audio cassettes, slide presentations and the like - all of which can be easily used in local situations. Wherever possible these should be integrated into regular activities rather than viewed as something special.

3. Expanded efforts must be supported to develop a variety of dissemination techniques such as the VIEW systems, computer-based approach, films, film strips, television shows, audio cassettes, career phone lines, etc. with carefully drawn evaluation requirements.

4. A national study should be made of the various systems of classifying and filing occupational information materials so that a common national system can be agreed upon which can be easily utilized at all user levels.

5. Counselor education programs must be supported which seek ways to integrate occupational information into the total training of prospective counselors rather than as separate aspects, with leadership support for the ACES "Position Paper on Counselor Preparation for Career Development/Career Education".

6. Materials must be prepared which emphasize the developmental aspects of occupational information and delivery modes that can be useful at the different stages of career development, such as a junior edition of the Occupational Outlook Handbook. These materials should focus on people's interests rather than totally on descriptions of occupations. In order to accomplish this, user surveys to more fully probe interests will need to be carried out.

7. More leadership needs to be developed among producers (especially government and professional) of occupational information materials in insuring the dissemination and proper use of new materials. Those who develop such materials, and are closest to them, must share a major responsibility for their adequate dissemination and use, especially in creating materials from national or state information which can be easily utilized at the local level. An opportunity to illustrate this type of support could be demonstrated through the way in which the fourth edition of the DOT is disseminated and interpreted to all users.

8. Materials must be developed which demonstrate how occupational information research can be useful to workers as they face the problem of retraining and up-dating of skills made necessary by advancing years or technological advances.

9. Studies must be conducted to evaluate the effectiveness of computerized delivery modes in providing the kinds of occupational information which meet the needs of individuals at the different stages of career development. In-depth investigations of the cost effectiveness of computerized information systems should be undertaken along with a study of whether local/state school funding can continue the current Federal initiative.

10. Studies must be expanded of innovative dissemination delivery modes which can facilitate direct student use of occupational information. Examples might be used of public or commercial television, toll free numbers, and columns on careers in especially prepared newspapers or in regular newspapers and magazines.

COST ESTIMATES

Model Pre-Service Occupational Information Curriculum

Phase One - Planning and Development (1 year)	$ 50,000
Phase Two - Field Testing (1 year)	100,000
Phase Three - Evaluation and Revisions (1 year)	50,000
Each year Allocations for project staaf, travel, consultants, supplies, materials, phone, and postage	
Total	$200,000

National Occupational Information In-Service Project

Phase One - Planning (1 year)	
project staff, travel, supplies, materials, phone, postage	$ 50,000
Phase Two - Field Testing and Evaluation (2 years)	
project staff, etc. ($50,000 per year)	100,000
faculty salary for 10-15 counselor educators (50,000 per year)	100,000
stipends and tuition for counselors (500,000 per year)	1,000,000
Total (2 years)	$1,250,000

Occupational Information Training Specialists

Phase One - Planning (1 year)	
staff, travel, supplies, materials, consultant, phone, and postage	$ 50,000
Phase Two - Implementation and Evaluation in a ten state pilot study (2 years)	
project staff, etc. (50,000 per year)	100,000
ten occupational training specialists (500,000 per year)	1,000,000
Total (3 years)	$1,150,000

University Center for Occupational Information

Center staff (per year)	$ 40,000
Graduate Students (stipends, tuition, and fees per year)	77,000
Research Support (travel, supplies, equipment, consultants, phone, postage per year)	33,000
Total (per year)	$150,000
Estimated cost for initial grant period of 4 years	$600,000

Model Statewide Centers for Occupational and Educational Information

Phase One - Planning and Development (1 year)	
project staff, travel, equipment, supplies, consultants, phone, and postage	$ 50,000
Phase Two - Implementation and Evaluation (2 years)	
project staff (50,000 per year)	100,000
funding for the ten state centers (500,000 per year)	1,000,000
Total (3 years)	$1,150,000

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Occupational Information
Dissemination Project
Work Statement

APPENDIX

Virginia Tech
Blacksburg, VA
Fall, 1976

I. Introduction

A. The Problem - The Department of Labor, other Federal government agencies, State government agencies, and private organizations develop occupational information that is extremely useful to counselors and others helping persons make the transition from school to work. This information does not get the widest possible dissemination in large part because users have not been trained to become aware of its existence nor its importance.

B. Solving the Problem

Wider dissemination of occupational information can result if users have the opportunity to learn of its availability and merits through the following three methods:

1. Through comprehensive courses in occupational information offered in university programs and other facilities training counselors.

2. Through workshops lasting about one week offered to practicing counselors, teachers, school officials and others dealing directly with persons about to make the difficult transition from school to work.

3. Through general orientation programs in labor market and occupational information lasting one or more hours presented for counselors, teachers, business officials, parents, and others having contact with persons making the transition from school to work, as well as to students themselves.

C. To implement these methods the following developmental work must be undertaken:

1. Develop the subject matter content of each of the above three methods of dissemination.

2. Develop strategies for implementing the three methods of dissemination so that as many persons as possible can be reached.

3. Develop estimates of costs to the Department of Labor for implementing each of these activities.

The objective of this project is to undertake this developmental work.

II. Specific Project Objectives

A. 1) Develop an outline specifying the subject areas of a program that would provide counselors in training and practicing counselors with comprehensive information on available national, state, and local occupational information; sources of information, instruction on methods of using materials such as the Occupational Outlook Handbook and Dictionary of Occupational Titles; and on developing programs designed to provide new and improved national, state, and local occupational information, such as the NOIS and OES programs.

2) Develop strategies for achieving wide use of such a curriculum in college programs training counselors.

3) Develop estimates of the costs associated with developing the details of the curriculum.

B. 1) Develop an outline specifying the subject areas of a curriculum for workshops designed to inform counselors, teachers, school officials, and others about materials that provide information about trends in industry and occupational employment; potential problems of persons making the transition from school to work; and other subjects determined necessary. The curriculum content should be designed for flexibility so it can be fitted to workshops serving a variety of audiences and of different durations.

2) Develop strategies for instituting workshops in a variety of settings throughout the country.

3) Develop estimates of the costs associated with developing the details of the curriculum.

C. 1) Identify the informational content for programs presented to counselors, teachers, parents, and students themselves that may last 1 or 2 hours, and identify special materials, such as slides, filmstrips, etc. that may be helpful to those making presentations before such groups.

2) Develop content of a curriculum for training a large number of speakers to present such programs, including ways of addressing a group of individuals with different interests such as counselors, parents, and students.

3) Develop strategies for instituting a program whereby a cadre of speakers will be available to conduct such programs.

III. Presentation of Results

The results of the project shall be presented in a written report that addresses each of the topics discussed in section II above. The contractor is expected to exercise considerable judgement reflecting experience in the field especially DOL programs designed to help in the transition from school to work. The contractor shall also be available for a briefing of concerned DOL officials on the results of the project.

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Time:
October 1, 1976
January 1, 1977